PFAS ISSUES

PFAS are a group of man-made fluorinated compounds which are used in a variety of applications by both industry and residential households. These chemicals are widely used because they are resistant to heat, water, and oil. PFAS have been in commercial use since the 1940’s and are abundant in today’s society. PFAS can be introduced into the body by eating or drinking contaminated food or liquid (including water) or by breathing in or touching products treated with PFAS, such as carpets or clothing. Two of the most common types (PFOS and PFOA) were phased out of production in the United States in 2002 and 2015 respectively, and over the same time, testing has revealed their presence in blood serum lowered dramatically by 70% for PFOA and 84% for PFOS. Recent legislative and regulatory efforts to address PFAS have tended to not differentiate between concentrations at producer and heavy-user contaminated sites and ubiquitous background levels in drinking water, groundwater, wastewater, or biosolids, despite the levels of PFAS found in these two instances being dramatically different. Sites found near manufacturers of PFAS can have levels of contamination at 100,000 to 500,000 ppt. At fire-fighting training sites, including military complexes, levels can be as high as 6,950,000 ppt. In contrast, the action levels currently being discussed for drinking water systems range from 5–40 ppt, an exceptionally small fraction of the concentrations found at highly contaminated sites.

There currently are legislative proposals in Congress and the State legislature pertaining to PFAS in drinking water, as well as efforts by the US EPA to develop a MCL and approve more test methods, and at the state level by OEHHA for a public health goal. Also, in March 2019, the State Water Board announced a large-scale, phased investigation of PFAS contamination in California. Phase 3 of the SWB’s investigation will commence in spring of 2020, and staff are considering limiting it by prioritization factors such as facility size, relative location to known hotspots, and proximity to sensitive watersheds to determine which facilities will receive monitoring orders. They also indicated stormwater is on their radar and information requests will be watershed specific.

What is the nexus between PFAS compounds in drinking water and wastewater influent?

What is the transport and fate of PFAS in wastewater?

Has your agency been monitoring for PFAS in its influent, effluent, or biosolids?

If so, given the lack of approved methods for non-potable water, how has the monitoring occurred?

Is your agency employing any treatment technologies?

Next steps

- Meet with the SWB staff to review the draft Phase 3 order to provide input for its implementation.
- Identify agencies currently performing monitoring and screening to see which data may be shared with regulators in order to limit the need for the information they may otherwise seek through the Order.
- Explore coordination strategies for complying with the Order amongst its recipients, including identifying labs with whom we have relative confidence in their detection methods.
- Improve our technical understanding of the scientific basis of OEHHA’s recommendations.
- Continue our outreach and educational efforts to federal and state policymakers.